with a strong swinging flight. A single bird flew from the second nest discovered, which was two feet down in a horizontal crack, and was similar in all respects to the first nest and contained three eggs. The eggs of the *Micropus pacificus* are typical Swift's eggs—pure white in colour and elongated in shape. Three apparently new nests were found close to each other in the same cranny, a long narrow aperture between two boulders. The remaining two nests were adjacent but separated, the whole area for the purpose being very restricted.

The rock was again visited five days later. All the nests now contained eggs, three of them one apiece only. No other nest beside that previously mentioned contained three eggs. One additional nest was discovered containing two eggs; this made eight nests in all. A Swift was found on each nest, but both birds at only two nests. Three Swifts made their appearance when the rock was approached on the latter occasion, and continued to fly round during the visit.

XXXVII.—Notes on Birds observed in the South Pacific Ocean during a voyage from Sydney to Valparaiso. By Charles F. Belcher.

On Thursday, October 23, 1913, I left Sydney as sole passenger in the steamship 'Knight of the Garter,' Captain David R. Stephens, bound with 10,000 tons of Newcastle coal for Valparaiso, which port was reached in due course on Sunday, Nov. 16. With the aid of a pair of field-glasses, I was able to make from time to time observations (chiefly from the poop-deck) on the birds seen. These may be worthy of record as throwing light on the geographical distribution of certain of the species noted, and also as providing material for inferences as to the locality of their breeding-haunts, of which little is as yet known.

The route taken across the south Pacific was not quite the Great Circle track between the two ports, which has its apex a degree or two farther south. I subjoin a table showing the position at noon of each day, the repetition of Oct. 28 being occasioned by the crossing on that date of the 180th meridian.

Date.		La	titude.	Lon	Longitude.	
October	23	$\overset{\circ}{34}$	17 S.	$15\overset{\circ}{3}$	9 E.	
,,	$24 \ldots$	35	43 S.	158	1 E.	
"	25	37	17 S.	162	48 E.	
,,,	26	39	1 S.	167	44 E.	
"	27	40	28 S.	172	51 E.	
"	28 (No. 1)	42	33 S.	177	37 E.	
"	28 (No. 2)	44	21 S.	176	54 W.	
23	29	45	56 S.	171	33 W.	
"	30	47	10 S.	166	W.	
"	31	47	58 S.	160	18 W.	
November	1	48	13 S.	154	21 W.	
"	2	48	25 S.	148	23 W.	
"	3	48	22 S.	142	14 W.	
"	4	48	23 S.	136	2 W.	
,,	5 ,	48	15 S.	130	3 W.	
"	6	48	11 S.	123	59 W.	
"	7	47	46 S.	117	56 W.	
"	8	47	17 S.	111	35 W.	
,,	9	46	22 S.	105	35 W.	
22	10	44	44 S.	100	9 W.	
,,	11	43	6 S.	94	39 W.	
,,	12	41	23 S.	89	20 W.	
,,	13	39	19 S.	84	31 W.	
"	14	37	21 S.	79	50 W.	
22	$15 \ldots$	35	6 S.	75	34 W.	
"	16	Val	paraiso			

Oceanites oceanicus.* Yellow-webbed Storm-Petrel.

A few small dark Petrels were seen on Oct. 24, which I believe were of this species. I next noticed one at 2.30 p.m. on Oct. 26, flying about a hundred yards in the rear of the ship, the white rump being very conspicuous. I noted one again the following day, Oct. 27, about two hundred yards behind the ship. This species rarely ap-

^{*} The nomenclature used is that of Mr. G. M. Mathews' "Birds of Australia."

proaches close enough for thorough examination through the glasses; and flying, as it does, close to the water, is frequently hidden in the trough of the great waves. Another was seen on Oct. 28 (No. 2); this time I could see the white belly as well as the rump. Two more were noted on Oct. 29; they were very swallow-like in their movements, skimming the waves; these were the last I saw.

Pelagodroma marina. White-faced Storm-Petrel.

On Oct. 28 (No. 2), when off Pitt Island (Chathams), I observed a few Petrels, which, from their very erratic and swallow-like flight, I made out to be of this species. They were dark grey above, white below and much darker on the back, and smaller than the Prions; they have the habit of flicking the water with their wings and feet, which Prions have not. The Prions appear stouter, and have a bolder and more regular flight.

Reinholdia reinholdi. Brown-backed Petrel. On Oct. 24 I noted a single specimen of this bird.

Neonectris tenuirostris. Short-tailed Petrel.

Oct. 23, a few seen. Oct. 26, one in the distance. Oct. 27 (passing through Cook Strait), numerous at some distance behind the ship; also many hundreds were seen to starboard. After leaving New Zealand waters they were not noticed.

Priofinus cinereus. Brown Petrel.

First noticed at 9 a.m. on Oct. 27, flying at about two hundred yards behind the ship. This was before entering Cook Strait. Oct. 28 (No. 2) (approaching Chatham Islands): two following. Oct. 29, at least a dozen together, nearer the ship's stern than the previous ones. The tail appears in flight bluntly wedge-shaped. Oct. 30, about twelve following. Oct. 31, about forty following at 8 a.m. Nov. 1, about twelve. Nov. 2, about twelve. Nov. 3, about twenty. Nov. 4, rather more than yesterday. Nov. 5, about the same as yesterday. Nov. 6, there are now at least a hundred following and flying about the ship. Nov. 7, rather fewer. Nov. 8, about the same as yesterday. Nov. 9, only

about a dozen. Nov. 10, eight or nine only. Nov. 11, about twelve. Nov. 12, about twelve. Nov. 13, about twelve. Nov. 14, only one following at 2 P.M. Nov. 15, only one, the last seen.

Priocella antarctica. Silver-grey Petrel.

The first example appeared at 3 P.M. on Nov. 3. In flight and general appearance it somewhat resembles the Brown Petrel. A white patch shows prominently near the end of the wings. Nov. 11, at 3.30 P.M. one made two complete circuits of the ship. The tail appears slightly wedge-shaped. When this bird went to pick up something from the wake it turned a half somersault as it reached the water, reminding me of a Tumbler-Pigeon. Nov. 14, at 2 P.M. one was following in our wake. The bill is horn-colour, the nostrils very small, and tips of the wings dark above. Late in the evening at least four were seen. Nov. 16 (Valparaiso), this species became plentiful as we neared the coast, and in the harbour appears to take the place occupied by Jameson's Gull in Australian ports, for it was in considerable numbers and very tame, swimming in companies about the tiers of moored ships. Judging from the dirty state of the water and the great quantities of garbage floating about, the town sewers must discharge direct into the bay, and so provide sustenance for this and other species.

Macronectes giganteus. Giant Petrel.

These birds first appeared the day after we passed through Cook Strait, Oct. 28 (No. 1). There were seven of them. The heavy light-coloured bill shows up conspicuously, even at a distance, in comparison with the dark plumage. The flight is soaring, with a few fairly rapid wing-beats at intervals. Oct. 28 (No. 2), four following. Oct. 29, three seen. The tail appears bluntly wedge-shaped, suggesting the tail of Aquila audax. Oct. 30, all had disappeared. Oct. 31, one seen. This species is a heavy, lumbering, ugly bird compared with the graceful Sooty Albatros (Phabetria palpebrata). No more till Nov. 4, when one was seen. None on Nov. 5, but one appeared on Nov. 6; none on Nov. 7,

but one on Nov. 8, and another on Nov. 9. Then no more were noted till Nov. 14, when one was seen which appeared to have the tail rounded and not wedge-shaped. After this, I saw none till we entered Valparaiso harbour, where these birds were plentiful, picking up a living with the Silver-grey Petrels from sewer refuse.

The sole bird of the white variety of this species which was met with on the journey, appeared with dramatic suddenness at the vessel's stern on Nov. 8 at 2 p.m., when the ship's company was mustered on the poop for the committal to the deep of the body of a Chinese fireman who had died earlier in the day. The great bird, pure white save for a few dark ermine-like flecks, showed up with startling clearness against the storm-clouds. None of the officers had ever seen such a bird, though this was their sixth voyage on that track.

Petrella capensis. Spotted Petrel.

The first was seen at midday on Oct. 26. The large white patches on upper surface of the wings are very noticeable when spread in flight. This bird flies with a rapid motion of the wings alternating with soaring, reminding one rather of the Black-cheeked Falcon (Falco melanogenys). By 2 P.M. there were three present. Oct. 27 (approaching Cook Strait), twenty at least following. Within the Strait itself we saw none. On Oct. 28 (No. 1), the number had increased to forty or more, but next day, Oct. 28 (No. 2), these had diminished to half a dozen, and on Oct. 29 to one. On Oct. 30 there was still a single individual to be seen, but next day, Oct. 31, there were three; on Nov. 1 two; two also on Nov. 2 and on Nov. 3. On Nov. 4 none were noted, on Nov. 5 one; no more were then seen till Nov. 11, when a pair were following. On Nov. 12 there was but one to be seen, on Nov. 13 two. At 2 P.M. on Nov. 14, at least twenty were following in our wake. On Nov. 15 there were twelve, and a few followed the ship right up to the South American coast at Cape Curanmilla. They were not seen inside Valparaiso harbour.

Prion (? genera Pachyptila, Pseudoprion, Heteroprion).

Oct. 25, one seen at 5 p.m. Oct. 27, abreast of Stephens Island, Cook Strait, I saw hundreds of Prions, most of them small, with light backs, and one larger, with a dark back; also two or three small ones, which flew with grebe-like rapid wing-beats, not swallow-like as the larger ones. Oct. 28 (No. 1), a good number seen at 9 A.M., and at 2 P.M. there were thousands of Prions in every direction about the ship, often fifty to a hundred on the water in a bunch together. Towards evening we left them behind. Oct. 28 (No. 2), a couple seen at 9 A.M. At 2.30 P.M. several noted. Oct. 29, twenty or more in one lot. Oct. 30, at noon a large number were following with other species in the ship's wake: they were also numerous in front and at the sides of the ship, and were easily the commonest bird from Cook Strait to this point. Oct. 31, countless Prions all about the ship. At 4 P.M. they seemed chiefly to be making west, opposite to the ship's direction. I judge that there are innumerable millions of Prions in these seas. They harmonise well with the sea-scape, their backs being blue-grey, the colour of the southern Pacific waves, and their bellies, as they turn in the sun, are white as the foam that breaks on the waves' edges beneath them. Nov. 1, only a few about in place of vesterday's great numbers, and this was also the case on every day till Nov. 12, on which day I did not see any. Thereafter, until reaching port on Nov. 16, I saw odd birds every day.

Diomedea exulans. Wandering Albatros.

Oct. 23 (off Sydney), numerous. Oct. 24, more seen. Some were all dark brown but for the belly and head: these divided below by a broad pectoral band of brown. Oct. 26, only eight following astern in the early morning; at 12.35 the number suddenly increased to fifteen or more as garbage was thrown over. Oct. 27, about twelve round the ship. Oct. 28 (No. 1), four seen. Oct. 28 (No. 2), one following in the wake. Oct. 29, one following, later one or two more: I note that some are white only on the middle of the back, others right to the centre joint of the wings. Oct. 30, three

in our wake. Oct. 31, 8 A.M., one very fine old one, with wings nearly all white above. Nov. 1, one seen. Nov. 2 one seen. Nov. 3, one or two seen (one with a sort of chocolate crown). Nov. 4, one or two seen. Nov. 5, none in morning, one in afternoon. No more seen till Nov. 9, when one seen. Nov. 11, one noted. Nov. 13, a fine one in sight. Nov. 14, several of great size seen, among them one young bird all brown above. Nov. 15, half a dozen seen. Nov. 16 (just off Valparaiso), one or two following. Captain Stephens says that they are more abundant in heavy weather.

Thalassarche melanophrys. Black-browed Mollymawk.

Oct. 23, very plentiful. The pronounced eye-stripe, yellow and black beak, and dark colour right across upper surface of the wings and back are very noticeable and contrast with the Wandering Albatros, whose bill is horn-colour and back whitish. The angle of the feathers at the base of the bill in the Black-browed species is so slight that the line appears nearly straight. Oct. 26, two seen at different times. Oct. 27 (nearing Cook Strait), none seen. Oct. 28 (No. 1), none seen. Oct. 28 (No. 2) (approaching Chatham Islands), one following astern. Oct. 29, three seen. Oct. 30, three following in our wake. Oct. 31, one following, but by next day this had disappeared, and I saw no more of these birds.

Nealbatrus chlororhynchus. Yellow-nosed Mollymawk.

On Oct. 28 (No. 2), when off Pyramid Rock, Chatham Is., I noticed a pair of what I take to have been this species, the most conspicuous mark being the dark grey of the head and neck, showing almost as dark as the back. On Oct. 29, at 5 p.m., I again saw two of them. On Oct. 31, one was following the ship. On Nov. 1, one of these birds came much closer than any had previously, and I could note that the upper part of the head and sides of the neck were dark grey; the culmen bright yellow, the rest of the bill appearing black. I could not see whether there was any break in the yellow before the tip of the bill. In flight, they seem smaller than the Black-browed species. On Nov. 3 at least

a dozen of these birds followed the steamer. The grey about the head varies a good deal. In some the whole head is grey, in others a strip of grey comes down and appears almost to meet in a neck-band, leaving a white mask like an Owl's. These last were commoner than those with all-grev heads, and there were gradations between. On Nov. 4 I noted four, and two or three were observable until Nov. 8, on which day the numbers increased to eight. On the 9th, only a few were seen, and so till Nov. 12, when I noted six, and that at least one had yellow right along the culmen to the tip. Some of the others seemed to have darker bills with less yellow; probably these are age differences, seeing that almost every bird showed individual variations in the amount of grey on the head and neck. On the 13th I noted two or three birds, none on the 14th, and one on the 15th. Approaching Valparaiso, I saw a bird which was about the size of this, but had a black bill and a pure white head.

Phæbetria palpebrata. Light-mantled Sooty Albatros.

These birds were not met with until we had passed the Chatham Islands. On Oct. 29, at 12 noon, the first appeared; it was very noticeable in contrast with the Giant Petrels, the Albatros, though of about the same size, showing clearly the finer bill, lighter and more greyish body (the head strikingly dark), and being altogether a slenderer, handsomer, and more graceful bird, tapering away from shoulder to pointed tail. The light mantle (contrasting with the darker wings) is easily discernible at some little distance, and as the bird gets closer, the white circlet of the eye can plainly be seen. At 5 p.m. on the same day, two were flying about the ship. Two were seen on the following day, Oct. 30, and one on Oct. 31. On Nov. 1 I saw three, the same number on Nov. 2, but from this date onward no more were seen.

Bruchigavia novæ-hollandiæ. Silver Gull.

A dozen or more flew about the ship when abreast of Stephens Island, Cook Strait, their dark red-brown bills contrasting with the clear yellow bills of *Larus dominicanus*. One perched on the ball on the top of each mast, while others took up positions in the rigging. We saw none after leaving New Zealand.

Larus dominicanus. New Zealand Black-backed Gull.

On Oct. 27, at 11 A.M., when fifteen miles off Cape Farewell (Cook Strait), the first of these birds flew over the ship. By noon, off Farewell Spit, half a dozen were about us, among them an immature bird showing the dark terminal tailband. Night fell as we passed the entrance to Wellington, and we saw no more of this species until on Nov. 16 off Cape Curanmilla (Chile), where several came out to meet us. In Valparaiso harbour they are very numerous, perching on the giant iron buoys.

Catharacta lönnbergi. Australian Skua.

I saw but a single example of this bird on the voyage, namely, on Oct. 31, in very cold weather, when it was blowing a gale and there had been a few snowflakes. This bird appears in flight as of a heavy, squat form, with roundish tail; the white markings near the ends of the wings are very noticeable.

XXXVIII.—Report on the Birds collected by the late Mr. Boyd Alexander (Rifle Brigade) during his last Expedition to Africa.—Part I. The Birds of Prince's Island. By David A. Bannerman, B.A., M.B.O.U., F.R.G.S.

The following paper is the first of a series which I hope to publish dealing with the collections made by the late Mr. Boyd Alexander on his last memorable expedition to Africa, from which, as all the world knows by now, he never returned. Much has been written of Boyd Alexander since his untimely death, which need not be recapitulated here.

He made a great reputation for himself as an ornithologist and explorer, and the present collections, which I have been privileged to work out, show that his admirable qualities as a collector had in no wise diminished. The birds which he sent home are in point of fact of exceptional value,